AMENDMENTS TO THE CLAIMS

1. (original) A advancing/retracting mechanism comprising:

a first cam including an angled surface and one of a first shoe and a helical surface having an axis of rotation;

a second cam including an angled surface and one of a second shoe and a surface perpendicular to the axis of rotation; and

a barrel including the other of the first shoe and the helical surface and the other of the second shoe and the perpendicular surface, the first shoe abutting the helical surface and the second shoe abutting the perpendicular surface, at least a portion of one of the cams being disposed in the barrel,

wherein the angled surfaces of the first and second cams substantially correspond in a first state, and are at least partially opposed in a second state, and the first cam travels a first distance along the longitudinal axis of the barrel from the first to the second state and the second cam travels a second distance that is greater then the first distance from the first to the second state.

2. (original) The advancing/retracting mechanism of claim 1 wherein the first cam includes the first shoe that slidingly engages with the helical surface on the barrel.

3. (original) The advancing/retracting mechanism of claim 1 wherein the second cam includes the second shoe that slidingly engages with the perpendicular surface on the barrel.

4. (original) The advancing/retracting mechanism of claim 1 wherein the first and second cams abut along more than a point of contact in the second state.

5. (original) The advancing/retracting mechanism of claim 1 wherein at least a portion of the angled surface is perpendicular to a longitudinal axis of the cam.

6. (original) The advancing/retracting mechanism of claim 1 wherein the angled surface is non-planar.

7. (currently amended) An advancing/retracting mechanism comprising:

a first cam including a first end and a second end, wherein the first end has a first angled surface and the second end operatively receives input from a user;

a second cam including a first end and a second end, wherein the first end has a second angled surface that engages with the first angled surface, and the second end operatively activates an output device; and

a barrel for receiving at least one of the first and second cams, the barrel including a helical surface, wherein a portion of the at least one of the first and second cams engages the helical surface as the at least one cam traverses from a first to a second position and rotates the cam relative to the other cam.

8. (original) The advancing/retracting mechanism of claim 7 wherein the portion of at least one cam is a shoe.

9. (original) The advancing/retracting mechanism of claim 7 wherein the portion of at least one cam slidingly engages with the helical surface of the barrel.

10. (original) The advancing/retracting mechanism of claim 7 wherein the first and second cams abut along more than a point of contact in a second state.

11. (original) The advancing/retracting mechanism of claim 7 wherein the first and second cams abut along a majority of the angled surfaces in a first state.

12. (original) The advancing/retracting mechanism of claim 7 wherein the angled surface of at least one cam has a first and a second portion that are parallel to each other and perpendicular to the central axis of one of the cams.

13-21. (canceled)

22. (new) An advancing/retracting mechanism comprising:

a first cam including a first end and a second end, wherein the first end has a first angled surface and the second end operatively receives input from a user;

a second cam including a first end and a second end, wherein the first end has a second angled surface that engages with the first angled surface, and the second end operatively activates an output device; and

a barrel including an inner helical surface, wherein a portion of one of the first and second cams is actuated along the inner helical surface from a first axial position to a second position axial position and simultaneously rotates relative to the other of the first and second cams during the advancing/retracting process.

23. (new) The advancing/retracting mechanism of claim 22 wherein the portion of at least one cam is a shoe.

24. (new) The advancing/retracting mechanism of claim 22 wherein the portion of at least one cam slidingly engages with the helical surface of the barrel.

25. (new) The advancing/retracting mechanism of claim 22 wherein the first and second cams abut along more than a point of contact in a second state.

26. (new) The advancing/retracting mechanism of claim 22 wherein the first and second cams abut along a majority of the angled surfaces in a first state.

27. (new) The advancing/retracting mechanism of claim 22 wherein the angled surface of at least one cam has a first and a second portion that are parallel to each other and perpendicular to the central axis of one of the cams.